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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,713	04/19/2007	Yoshihito Ohkawa	1000023-000114	3547
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EXAMINER				
LEE, DORIS L				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
07/28/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
offserv@bipc.com

# Office Action Summary

**Application No.**

10/587,713

**Applicant(s)**

OHKAWA, YOSHIHITO

**Examiner**

Doris L. Lee

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-8 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Interval Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 25, 2010 has been entered.

### *Claim Rejections - 35 USC § 103*

2. **Claims 1, 4-8 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ouchi (US 2002/0086928)**.

**Regarding claims 1 and 15**, Ouchi teaches a flame retardant polyamide (Abstract) composition which comprises:

- 20 to 85% by mass of a polyamide (Abstract)
- 5 to 40% by mass of a brominated flame retardant ([Abstract])
- 0.1 to 10 % by mass of a plurality ([0088]) of zinc compound ([0085]) such as zinc borate ([0085]) and/or zinc phosphate ([0087])
- 5 to 50 % by mass of a reinforcing material (Abstract)

It is note that the anti-drip agent is not mandatorially present, however the examples indicate that 1 part by weight (approx. 1% by mass) of anti-drip agent can be used ([0160]).

However, Ouchi fails to teach that the zinc compounds such as zinc borate and zinc phosphate can be used as a mixture with a ratio of 1:0.1 to 1:5.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the zinc borate and zinc phosphate in a 1:1 mixture. It is noted that, when faced with a mixture, one of ordinary skill in the art would be motivated by common sense to select a 1:1 ratio, a ratio that falls within the presently claimed amount, absent evidence of unexpected or surprising results. Case law holds that "[h]aving established that this knowledge was in the art, the examiner could then properly rely... on a conclusion of obviousness, 'from common knowledge and common sense of the person of ordinary skill in the art within any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

**Regarding claim 4**, Ouchi teaches that the polyamide (A) comprises:100% by mole of recurring units comprising a dicarboxylic acid component unit (a-1) consisting of 30 to 100% by mole of a terephthalic acid component unit, 0 to 70% by mole of an aromatic dicarboxylic acid component unit other than terephthalic acid, and/or 0 to 70% by mole of an aliphatic dicarboxylic acid component unit having 4 to 20 carbon atoms (provided that the total amount of these dicarboxylic acid component units is 100% by mole), and a diamine component unit (a-2) consisting of an aliphatic diamine component unit and/or an alicyclic diamine component unit (Abstract).

**Regarding claims 5**, Ouchi teaches that the polyamide (A) comprises 50 to 100% by mole of 1,6-diaminohexane with respect to the diamine component unit, and has a melting point in the range of 290 to 350°C, and an intrinsic viscosity [η], as

measured in a concentrated sulfuric acid at 25°C, in the range of 0.5 to 3 dl/g ([0161]-[0166]).

**Regarding claims 6 and 7**, Ouchi teaches that a molded product, namely a connector, can be made with the composition as recited in claim 1 ([0001]).

**Regarding claim 8**, given that modified Ouchi teaches all the components of composition and the amounts of each of the components overlaps significantly with the claimed invention, it is therefore inherent that the prior art composition has the desired properties as listed in the present claim since such properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

### ***Response to Arguments***

3. Applicant's arguments filed June 25, 2010 have been fully considered but they are not persuasive for the reasons set forth below:

4. **Applicant's argument:** Horacek does not teach the combination of flame retardants as presently claimed.

**Examiner's response:** *This has been remedied by using the Ouchi reference which was necessitated by the amendment filed on June 25, 2010.*

5. **Applicant's argument:** The applicant argues unexpected results in Table 1 of the specification.

**Examiner's response:** *The examiner has considered the data in Table 1 of the specification and applicant's argument of unexpected results is not persuasive. First,*

*applicant has failed to supply data that is commensurate in scope with the claimed invention. For example, the amount of polyamide tested is quite narrow compared to the claimed range of 10 to 80% by weight. The same can be said for the other ingredients such as the zinc borate and the zinc phosphate, the halogenated-flame retardant, etc. As such, the data provided does not show unexpected results over the entire scope of the claimed invention and applicant's argument of unexpected results is not persuasive.*

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doris L. Lee whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Doris L Lee/  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796